



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
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July 26, 2007

Mr. Thomas Macchiarella, Code 06CA.TM
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

RE: Draft Record of Decision for Site 27, Dock Zone, Alameda Point

Dear Mr. Macchiarella:

EPA has reviewed the above referenced document, submitted by the Navy on April 19, 2007. The regulatory agencies took a 30 day extension on the 60 day review period. The Record of Decision is well written and presented and we have no major concerns with the document. However, we recommend removing arsenic as a GW COC in the draft final ROD because of the very infrequent detections in groundwater samples of arsenic above the federal MCL. A few revisions in the text would be required to remove the arsenic as a COC and we have outlined our recommendations in General Comment #1.

Our other, mostly minor, concerns are detailed in the enclosed comments. Any comments we receive from EPA HQ concerning ICs will be sent to you immediately. We look forward to working with you to finalize this ROD. Do not hesitate to call me at (415) 972-3029 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Anna-Marie Cook".

Anna-Marie Cook
Remedial Project Manager

enclosure

cc list: Michelle Hurst, Navy
Dot Lofstrom, DTSC
Erich Simon, Water Board
Peter Russell, Russell Resources, Inc
Suzette Leith, EPA
John Chesnutt, EPA

**EPA Review of the Draft Record of Decision for IR Site 27,
Dock Zone, Alameda Point**

General Comments:

1. Arsenic does not need to be included as a GW COC because there are very infrequent detections of arsenic above the federal MCL. We recommend that arsenic be removed as a COC and the following changes made in the ROD:
 - a. The section on "Identification of Chemicals of Concern," sec. 7.1.4, pages 7-5 and 7-6 should include a statement that very few arsenic samples exceed the MCL of 10 ppb, and most are in the range of 3-5 ppb. There should be a similar edit in Sec. 5.3.2 on page 5-4 and in Table 5-2.
 - b. In Section 8, RAOs, p. 8-1, in the first paragraph following the bullets, the last two sentences should be removed. If a groundwater contaminant is a COC and concentrations exceed MCLs, it cannot automatically be assumed that cleanup levels can exceed MCLs, even if background levels exceed MCLs. The two sentences on page 8-1 are unnecessary if arsenic is not identified as a COC. Also, please remove arsenic from Table 8-1.
 - c. In Section 13, Statutory Determinations, subsection 13.2.1, Chemical-Specific ARARs, the discussion of the arsenic MCL should be deleted if arsenic is not identified as a COC.
 - d. Sec. 12.2.3, page 12-5, ICs, remove arsenic from the RGs in the last bullet.

It seems that it would be most logical and informative to discuss the changes in the sections on risk and selection of COCs, and again briefly in the section setting forth the RGs (which is essentially what the Navy chose to do originally when they proposed keeping arsenic as a COC but changing the RG). We would not be adverse to the Navy determining that this is not a significant change, but think the ROD should indicate in an appropriate place what the change is and why it was made.

2. In some places, the ROD describes the soil remedy as "no action" (e.g., Table D-1, page D-5, second paragraph under "Description," second line; Sec. 12.2, p. 12-2). In several other places, however, the soil remedy is described as no "further" action. This should be changed to "no action," as the ROD does not indicate any prior remediation was undertaken for soil. See, e.g., page D-1 (two places); Table D-1, third paragraph under "Description"; Table D-1, page D-5, end of second paragraph; page 7-1, Sec. 7, third paragraph; Sec. 12.1, page 12-1, first paragraph; Section 14, second line.

Specific Comments:

1. **Page D-1, second paragraph, second sentence:** Recommend deleting the word “immediate” before the word “threat”. Saying no immediate threat implies that there is a longer term threat, when in fact there is no threat.
2. **Page D-1, first sentence under “Assessment of the Site” header:** Please delete the word “further” from this sentence since there has been no action taken for the soil in the past at this site.
3. **Page D-2, first full paragraph,** the ROD states that the site poses no unacceptable risk from soil “based on current and reasonably anticipated future land uses.” We recommend either including a parenthetical “(including residential use)” following “future land uses,” or, as an alternative, removing the language “based on current and reasonably anticipated future land uses.” Same recommendation for the first paragraph under the heading “Description of the Selected Remedy” and on page 7-1, Sec. 7, second paragraph.
4. **Page D-2, second paragraph, third sentence:** Please note that while the sampling of the OWS and the wash down areas may also satisfy the RCRA SWMU requirements, these actions are being done under CERCLA and if there are contaminants in the soil above residential PRGs, a CERCLA soil clean up action may be necessary.
5. **Page D-2, third bullet:** Recommend deleting the word “confirmation” before sampling as it is redundant with the later phrase “to confirm treatment has reduced...”, and “proposed” should be changed to “selected.”
6. **Page D-3, end of first full paragraph on this page:** Add in a sentence stating “Institutional Controls will be maintained until the concentration of hazardous substances in the groundwater reach remediation goals and are at such levels to allow for unrestricted use and exposure.”
7. **Page D-4, third checklist item, description, second sentence:** Delete the word “further” from “no action” because there has not been any past action taken on soil at this site.
8. **Page D-4, last checklist item, description:** Suggest adding to last sentence the phrase “including unrestricted use.”
9. **Page D-5, last checklist item:** Recommend an additional spacing between the two items in the checklist on this page for easier reading. Also the description of the last item should delete the word “further” from the third to last sentence since no past soil action has been taken at this site.
10. **Page D-6, first sentence:** Please delete the word “further” from this sentence.

11. **Table 1-1, page 1, second paragraph, second to last sentence:** Please verify location of fuel farm. It seems that stating that it is located in the “northern” or “northwestern” portion of IR 27 would be more accurate.
12. **Page 2-4, second to last paragraph, last sentence:** Please delete the word “further”.
13. **Page 2-5, Section 2.2.2, second paragraph, fourth sentence:** Please clarify this sentence. As written it sounds as if the tanks have contributed to groundwater contamination. Is this correct?
14. **Page 2-5, Section 2.2.2, second paragraph, seventh sentence:** Please rephrase this sentence. Data gap sampling is not an action, as it relates to actions explained in a ROD. Additionally, the ROD has stated in many places that it is selecting “no action” for soil, so it is confusing to suddenly see “further action” taken for soil in this paragraph. Recommend simply deleting the words “further action” here and removing brackets from “data gap sampling”.
15. **Table 2-1, under date 2002-2004:** Both Objective and Summary of Findings descriptions should remove the word “further” from the text. The word “immediate” should also be deleted from the Summary of Findings.
16. **Table 2-3, SWMUs OWS-166A and B, WD 166:** Please note that if soil contamination is found at levels above residential PRGs, it may be necessary to perform a CERCLA clean up action for soil.
17. **Page 4-1:** Please add the phrase “AND RESPONSE ACTION” to the title on this page. In addition, please include a paragraph describing the response action similar to that found in the RODs for IR 26 and IR 28.
18. **Page 5-4, last sentence of second paragraph:** Since the detection limits were set above PRGs, the samples cannot be considered confirmation samples. Is there any other information available that would yield better support for not considering tetraethyl lead to be a problem?
19. **Page 5-4, third paragraph, third sentence:** There appear to be only three samples where iron exceeds the residential PRG and one where thallium exceeds the residential PRG. It would support the decision to not consider these metals releases to state this information. Suggest removing the third sentence and replacing with “Three soil samples had concentrations of iron, which is an essential nutrient, above the residential PRG and one soil sample had a concentration of thallium slightly above the residential PRG. All other samples yielded iron and thallium concentrations below PRGs, leading to the conclusion that neither iron nor thallium are a concern in soil.”

20. **Page 5-4, Section 5.3.2, last paragraph, second sentence:** Please elaborate on the mechanism that could have locally mobilized arsenic in soil. Also, it should be mentioned here that arsenic exceeded the MCL only infrequently. The majority of the samples yielded arsenic concentrations below the level of the MCL.
21. **Page 5-5, Section 5.3.3:** Both chlorinated VOCs and fuel-related VOCs are stated as being located in the western portion of IR Site 27. Are they co-located? Please explain.
22. **Table 5-1:** The concentration listed in the table for tetraethyl lead is over a 100 times greater than the residential PRG. Please provide more information on this very high hit. What was the detection limit? It is stated in the text on Page 5-4 that confirmation samples had detection limits set above the PRGs so the percent reported above the detection limit is not very useful for this contaminant. Also, please explain the relation to dioxin/furan results and the tetraethyl lead stated in footnote "g".
23. **Page 7-1, third paragraph, last sentence:** Please delete the word "further".
24. **Page 7-5, Residential Scenario Cancer Risks:** Consider including a brief description of the major risk drivers, i.e. VOCs for this scenario in this paragraph. Otherwise the reader has to keep reading until the following page to find out that information.
25. **Page 7-6, first paragraph:** Suggest not including arsenic as a risk driver and COC here. There are very few hits of arsenic above the federal MCL and all of the concentrations are below the state MCL. The majority of the risk in groundwater is due to the VOCs (as stated in the last paragraph). It seems that giving an explanation in this section, as well as in the section discussing remediation goals, as to why arsenic is not a COC would be useful and would support the selected remedy which does not address arsenic. The argument for not considering arsenic in groundwater should also be presented with an additional sentence at the end of the section discussing incremental risk on this page.
26. **Page 8-1, third paragraph:** Recommend removing the RG for arsenic (see general comment), and the last two sentences of this paragraph.
27. **Page 8-1, last paragraph:** Delete the word "further" from the first sentence. Also, please remove the word "immediate" as it implies that there remains a long-term threat.
28. **Sec. 9.2, p. 9-2, fourth line from the top,** we recommend adding "current and" before "future landowner(s)", consistent with the language on page 12-3, Sec. 12.2.3.

29. **Page 10-3, Section 10.6, last paragraph:** Is the implementability actually “low” for this technology? It appears to have successfully been implemented at Site 9 and the two plumes at Site 16 with little difficulty. Having low implementability for the selected remedy is unusual.
30. **Sec. 10.7, p. 10-3, Cost.** We recommend adding a statement that although Alternative 6B rates low in cost due to higher net present value, it also has the lowest total cost.
31. The ROD is ambiguous about whether MNA is considered part of the remedy. Figure 12-2 includes a box “implement MNA,” suggesting that MNA could be part of the remedy, although the text never clearly explains this. The remedy bullets in the Declaration do not mention MNA, while the bullets on page 12-1 include “groundwater confirmation sampling, including the measurement of MNA parameters” in the remedy. We recommend that this be clarified.
32. **Page 12-1, Section 12.1, first paragraph:** Delete the word “further” from the second sentence.
33. **Sec. 12.2.3, page 12-3, second paragraph.** At the beginning of the second sentence, we recommend adding “If the property is transferred,” (unless the Navy intends on entering into covenants with DTSC while the property still is held by the Navy).
34. **Section 12.2.3, page 12-4 and 5, IC objectives.**
- a. The bullet prohibiting the installation of new groundwater wells suggests that there may be existing groundwater wells. We recommend an additional bullet clearly prohibiting the consumption of groundwater until the remedial goals have been achieved.
 - b. It would be preferable to say “until remedial goals have been achieved” rather than “until cleanup objectives are achieved” to avoid any lack of clarity as to whether the cleanup objectives are something different from the RGs.
 - c. The first bullet preventing residential use appears to be a permanent prohibition. Our understanding is that this prohibition is only needed until RGs are met. We recommend this be added so that it will not be necessary to obtain approval by the Navy and FFA signatories for residential use once RGs are met. The statement on page 12-5 that ICs will remain in place until the RGs have been achieved does indicate that residential use will be permissible once the RGs have been achieved.
 - d. It would be clearer to just say the ICs will remain in place until the following RGs have been achieved, rather than saying “until RAOs and the following RGs are achieved.”

35. **Figure 12-1:** The recently submitted figure showing the IC boundaries superimposed on the site boundaries should be included in the draft final ROD with a figure title stating that the figure shows site and IC boundaries.
36. **Page 12-5:** Recommend deleting the arsenic RG from the bulleted list.
37. **Section 12.2.3, page 12-6, last paragraph.** Line two should read “enforcing the ICs” and lines 5-6 should read “Should any of the ICs fail” (rather than “IC objectives”). As an alternative “IC objectives” could be changed to “IC controls.” It is difficult to measure whether an objective is being met for purposes of enforcement. See, e.g., DF ROD for OU5.
38. **Page 14-1, first sentence:** Please delete the words “further” and “immediate” from this sentence.